

INDIVIDUAL TREE ASSESSMENT

March 16, 2025

James Ippolito

Olde Colonial Tree & Landscape Inc.

MCA #1239

Tree Statistics:

Address: 121 Downer Avenue, Hingham, MA 02043

Tree location: Southwest side of the house along fence line

Tree genus and species: Red oak (*Quercus Rubra*)

Tree diameter at breast height (4'6" from ground): 40"

Height: approx. 60 feet

Canopy spread: approx. 50 feet

Critical route zone (CRZ): 40' radius

CRZ area: 5025 square feet

Existing Conditions:

The tree appears healthy with no visible trunk decay.

The current CRZ is impaired by about 35%. This is due to approx. 15% disturbance from the 235 Otis footprint, 5% infringement from the 121 Downer footprint, and 15% impairment from the impervious driveway.

There are visible ledge outcroppings within the CRZ, further inhibiting root stability.

Approx. 30-40% of the canopy has been removed in the past judging from visible pruning cuts. This is a significant reduction in the tree's ability to generate energy.

The tree is top heavy due to major limbing-up. The tree is located by the ocean and is subject to heavy northeasterly winds. All of this increases the chance of storm damage and/or root failure.

Proposed Construction:

The proposed construction would result in the CRZ being impaired by approx. 35%, which is similar to today's impairment. There would be more disturbance from 121 Downer's foundation, but the impervious driveway would be removed, helping the tree. The disturbance percentage could go higher depending on the degree of over-dig for the new foundation.

The tree is 16 feet from the proposed house. This is mostly concerning when combined with the existing conditions.

The client asked whether moving the proposed house 5 feet farther away would have a meaningful impact on the health of the tree. It would have a limited positive impact, as that would be only a 3% improvement to the CRZ.

Recommendation:

I recommend removal of the tree.

This is based primarily on the existing conditions outlined above. I recommend removal whether there is additional CRZ disturbance or not.

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